Attorney Docket No.: 74120-301389

Remark

The Applicant respectfully requests reconsideration of this application as amended. In this amendment, Applicant has amended claims 1-4, 7, 10, 15 and 17-19. Claims 20-21 have been canceled, without prejudice. No claims have been added. Hence, claims 1 -19 remain pending in this application after entry of this amendment. Applicant submits that no new matter has been added by these amendments.

Claim Objections

The Examiner has objected to claim 10 because of an informality. In order to put claim 10 in better form, claim 10 has been amended as suggested by the Examiner on Page 2 of the Office action. Applicant requests that this objection be withdrawn.

Claim Rejections – 35 U.S.C. § 103

Claims 1-3 and 7-16

The Examiner rejected claims 1-3, and 7-16 under 35 U.S.C. 103(a) as being allegedly unpatentable over U.S. Pat. No. 6,665,271 of Thomas et al (hereafter "Thomas") in view of U.S. Pat. No. 6,754,232 of Tasker (hereafter "Tasker"). The undersigned respectfully disagrees with the Examiner's characterization of Thomas and Tasker and points out several distinctions between the claimed subject matter and the teachings of Thomas and Tasker.

As presently understood by the undersigned, Thomas generally relates to *predicting* the quality of communications over the internet. (col. 1, ll. 17-19) The prediction system accepts historical data and current environment data and, in response, generates a *prediction* of objective performance characteristics. Then, the *predicted* objective performance characteristics are used to generate an *estimate* of the expected quality of communications with an end user. (abstract and col. 3, ll. 4-16) This process is performed with the implementation of a neural network. Training data for the estimation neural network relies on specialized telecommunications measurement testing. The network will be separately trained for each of the common coding and decoding algorithms typically used by endpoint devices, including G.711, G. 723, etc. (col. 12, ll. 50-67)

The undersigned agrees with the Examiner's comments on pages 4, 5, 6, and 7 of the Office action that Thomas does not disclose: (1) selecting a service level; (2) a network

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wherein measuring comprises measuring the voice call listening quality using a perceptual test model; (3) a network wherein VoIP signaling Protocol comprises SIP; and (4) associating said service levels with phone numbers associated with users. In addition, the undersigned believes Thomas does not teach or reasonably suggest at least the following: (1)   measuring the voice call listening quality; (2) selecting a service level prior to initiating the VoIP test call; (3) a test probe having a plurality of addresses each associated with a different service level; and (4) the service levels are each based on a type of IP signaling protocol and a type of voice codec.

As presently understood by the undersigned, Tasker generally relates to dynamic codec speed selection based upon demand to provide an optimal match between voice and data payload bandwidth requirements and codec bandwidth capacities. (col. 1; ll. 8-13; abstract; col. 1; ll. 38-39) Specifically, Tasker teaches monitoring a call in a telephone system to determine the type of codec being used thereon and to measure the payload on the codec. Then, comparing the determined capacity with the measure payload and selectively switching the call to a higher operation speed based upon the result of the comparing. (abstract; col. 1; ll. 38-46) In view of the foregoing, the undersigned believes Tasker does not teach or reasonably suggest at least the following: (1) measuring the voice call listening quality; (2) initiating a test call; (3) selecting a service level prior to initiating the VoIP test call; and (4) associating different service levels with phone numbers of a test probe.

Regarding claim 1, as amended, the combination of Thomas and Tasker fails to teach or reasonably suggest "programmatically initiating VOIP test calls from a test probe ... having a plurality of addresses ... associated with a different service level of a plurality of service levels ... based on a type of internet protocol (IP) signaling protocol and a type of voice codec;" and "measuring voice call listening quality according to the selected service level for voice calls transmitted across a VOIP network" in the manner required.

At least as described above, Thomas teaches the use of *predicted* performance characteristics that are used to generate an *estimate* of the expected quality of communications with an end user. At least as described above, Tasker teaches monitoring a call and selectively switching the call to a higher operation speed based upon the result of comparing the measured payload capacity with the determined capacity of the codec. Furthermore, Tasker does not teach or reasonable suggest the selection of a service level prior to initiating a test call as recited in claim 1 as amended. As such, the combination of Thomas and Tasker is no more relevant to

measuring voice call listening quality in the manner claimed than either reference taken alone. For example, neither Thomas nor Tasker show any contemplation regarding the need to associate different service levels with each of a plurality of addresses of a test probe. For at least these reasons, claim 1 and its dependants are distinguishable over Thomas in view of Tasker.

Claims 19-21

The Examiner rejected claims 19-21 under 35 U.S.C. 103(a) as being allegedly unpatentable over Thomas in view of U.S. Pat. No. 6,665,271 of Clark (hereafter "Clark"). The undersigned respectfully disagrees with the Examiner's characterization of Thomas and Clark and points out several distinctions between the claimed subject matter and the teachings of Thomas and Clark.

As presently understood by the undersigned, Clark generally relates to subjective quality monitoring by simulating the parameters of a statistical model. The statistical model represents the probabilities of packet based transmission systems being in a low loss state or a high loss state and uses the estimates to predict the subjective quality of the multimedia signal. (abstract) In view of the foregoing, the undersigned does not find any teachings or reasonable suggestion of at least the following in Clark: (1) measuring voice call listening quality; (2) selecting a service level prior to initiating a VoIP test call; (3) a test probe having a plurality of addresses each associated with a different service level; and (4) the service levels corresponding to different combinations of a type of IP signaling protocol and a type of voice codec.

Regarding claim 19, as amended, the combination of Thomas and Clark fails to teach or reasonably suggest causing a computer to "associate a different service ... with each phone number of a plurality of phone numbers of a test probe" where "each service level ... [corresponds] to different combinations of a type of internet protocol (IP) signaling protocol and a type of voice codec" and "responsive to a test voice call directed to one of the plurality of phone numbers, cause the test voice call to be transferred over the VOIP network to such phone number of the test probe at the associated service level and causing a voice call listening quality to be measured at the test probe" in the manner required.

At least as described above, Thomas teaches the use of *predicted* performance characteristics that are used to generate an *estimate* of the expected quality of communications with an end user. At least as described above, Clark relates to subjective quality monitoring by

simulating the parameters of a statistical model representing the probabilities of packet based transmission systems being in a low loss state or a high loss state and uses the estimates to predict the subjective quality of the multimedia signal. Finally, neither Thomas nor Clark even contemplate a test probe having multiple phone numbers each associated with a different service level. Consequently, the combination of Thomas and Clark is clearly lacking the above-quoted limitations required by claim 19, as amended. For at least these reasons, claim 19 is distinguishable over Thomas in view of Clark.

Claim Amendments

Applicant has amended some of the claims to more clearly claim subject matter of the invention. Applicant submits that such amendments are for clarification purposes only, and do not limit or narrow the claims in any way. Indeed, in some instances, the amendments broaden the claims. In any event, Applicant respectfully submits that the claims are allowable over the combination of references relied upon by the Examiner, and respectfully requests the Examiner to promptly issue a Notice of Allowance.

Conclusion

Applicant respectfully submits that the amendment and remark have overcome the rejections, and that the pending claims are in condition for allowance. Accordingly, Applicant requests that the rejections be withdrawn and that a Notice of Allowance be issued for claims 1-19.

Request for a Telephone Interview

If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at (303) 447-7739.

Respectfully submitted,

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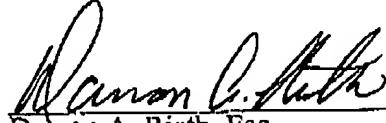
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